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IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			EXAMINER AL HASHEMI, SANA A	
			ART UNIT 2164	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
2 MONTHS	04/18/2007	ELECTRONIC

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/044,782  
Filing Date: January 11, 2002  
Appellant(s): ARNING ET AL.

**MAILED**

**APR 16 2007**

**Technology Center 2100**

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Robert A. Voigt, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 8, 2007 appealing from the Office action mailed September 22, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding Claims 1-13 the claimed invention is directed to non-statutory subject matter.

It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.

Prior to focusing on specific statutory requirements, Office personnel must begin examination by determining what, precisely, the applicant has invented and is seeking to patent, and how the claims relate to and define that invention. (As the courts have repeatedly reminded the Office: "The goal is to answer the question What did applicants invent?" In re Abele, 684 F.2d 902, 907, 214 USPQ 682, 687. Accord, e.g., Arrhythmia Research Tech. v. Corazonix Corp., 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992).) Consequently, Office

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personnel will no longer begin examination by determining if a claim recites a "mathematical algorithm." Rather they will review the complete specification, including the detailed description of the invention, any specific embodiments that have been disclosed, the claims and any specific, substantial, and credible utilities that have been asserted for the invention.

A. Identify and Understand Any Practical Application Asserted for the Invention The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since

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the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Although the courts have yet to define the terms useful, concrete, and tangible in the context of the practical application requirement for purposes of these guidelines, the following examples illustrate claimed inventions that have a practical application because they produce useful, concrete, and tangible result:

In the instant application

Regarding Claims 1, 10, 11, and 13, there is no tangible in the steps performed. The claim language does not disclose tangible structure in the body of the claims. Since the claimed invention is a program application that is a non-functional descriptive material, in other words claiming software that can be run on a computer and it's not tied to the structural.

#### **(10) Response to Argument**

Appellant argues that claims 1-13 are improperly rejected under 35 U.S.C. § 101.

“Appellants argues that the Examiner contends that the cited claims do not produce a useful, tangible result. However, claims 1-13 clearly do produce a useful, tangible result. For example,

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referring to claim 1, claim 1 is directed to a method for determining the quality of a result of a clustering data processing operation, which includes the steps of: determining a foreground frequency of a bucket within a first cluster; determining a background frequency of the bucket with respect to all of the clusters; comparing the foreground and background frequencies; and determining a quality index based on the comparison. Determining a foreground and a background frequency; comparing the foreground and background frequencies; and determining a quality index are steps that are directed to a useful, tangible, result, namely determining the quality of a result of a clustering data processing operation.”

Examiner disagrees. The claimed limitations failed to provide a tangible concrete useful results, it is required for a subject matter to be useful, concrete and tangible result to meet the practical application requirement such as supports a disclosed substantial, credible utility, and assured substantially repeatable, in a real world not abstract enables usefulness to be realized as stated in the MPEP 2106 “The claimed invention as a whole must >be useful and< accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” State Street, 149 F.3d at \*1373-74<, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 \*\*> (1966); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). USPTO personnel should review the application to identify any asserted use. The applicant is in the best

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position to explain why an invention is believed useful. Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful. Such a statement will usually explain the purpose of the invention or how the invention may be used (e.g., a compound is believed to be useful in the treatment of a particular disorder). Regardless of the form of statement of utility, it must enable one ordinarily skilled in the art to understand why the applicant believes the claimed invention is useful. See MPEP § 2107 for utility examination guidelines. An applicant may assert more than one utility and practical application, but only one is necessary. In the instant application the claimed limitation calls for determining steps, which does not provide a tangible, concrete and useful results therefore it is believed that the claims subject matter fails to meet the 101 requirements.

Appellant argues that claims 1-13 were rejected under 35 U.S.C. 112 2<sup>nd</sup> paragraph is improper.

Examiner agrees therefore the 112 2<sup>nd</sup> paragraph rejection has been withdrawn.



**(11) Related Proceeding(s) Appendix**

For the above reasons, it is believed that the rejections should be sustained.

An appeal conference was held on December 16, 2005 with conferees:

Sana Al-Hashemi (Primary Examiner), John Cottingham (SPE), and Charles Rones (SPE)

Respectfully submitted,

SA

April 9, 2007

Conferees:

John Cottingham

A large, stylized handwritten signature in black ink, likely belonging to John Cottingham, written over the printed name.

Charles Rones

A handwritten signature in black ink, likely belonging to Charles Rones, written over the printed name.

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